ABSTRACT

Utilization of fringe field tailoring pixels with sub-pixel patterns are introduced into the bitmap of an image to obtain local control of the normal and tangential electric fields and thereby improve image development. These fringe field tailoring pixels embody multiple sub-pixel pulses so as to alter the electric fields as developed upon the photoreceptor. These fringe field tailoring pixels compensate for the otherwise undesirable electric fringe fields as found on the edge of image shapes. These undesirable fringe fields pull toner away from image edges and cause other "slow toner" effects, particularly in high speed systems. Application of fringe field tailoring pixels with their sub-pixel patterns to the edge of an image shape modifies the fringe electric fields so as to encourage pulling toner onto the photoreceptor at the image edge. This ensures adequate toner supply to all parts of the image so that the desired printing pixels will print as intended.